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RABIN & Berdo, PC 1101 14TH STREET, NW SUITE 500 WASHINGTON, DC 20005			EXAMINER KAO, CHIH CHENG G	
			ART UNIT	PAPER NUMBER
			2882	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	10/519,383		KATZ, ELISABETH	
	Examiner		Art Unit	
	Chih-Cheng Glen Kao		2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17, 19-24 and 26-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27 and 28 is/are allowed.
- 6) ☒ Claim(s) 1-17, 19-24 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f):
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings were received on January 3, 2007. These drawings are acceptable.

Claim Objections

2. Claims 11 and 24 are objected to because of the following informalities, which appear to be minor draft errors including grammatical and/or lack of antecedent basis problems.

In the following format (location of objection; suggestion for correction), the following correction(s) may obviate the objection(s): (claim 11, line 3, "the substantially equal angle"; changing the dependency of claim 11 from claim 10 to claim 22), (claim 24, line 2, "the flat angle"; changing the dependency of claim 24 from claim 21 to claim 11), and (claim 24, line 3, "the polarizer"; replacing "the" with --a-- and inserting --arranged in a beam path from the X-ray source-- after "polarizer").

For purposes of examination, the claims have been treated as such. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6, 13, 15, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohzawa (US 6965663) in view of Raatikainen (US 5721759).

4. Regarding claim 1, Ohzawa discloses a device comprising a device (fig. 1, #13) for a substance to be measured (fig. 1, #12), and a measuring station, further comprising an X-ray source (fig. 1, #3) and an X-ray fluorescence detector (fig. 5b, #19) having a radiation inlet (fig. 5b, #26a), wherein a first X-ray conductor (fig. 5b, #26) extends from the radiation inlet of the X-ray fluorescence detector in a direction of the device (fig. 1, #13).

However, Ohzawa fails to disclose a conveying device configured to continuously convey a substance to be measured.

Raatikainen teaches a conveying device configured to continuously convey (fig. 1, via #2) a substance to be measured (fig. 1, #1).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to modify the device of Ohzawa with the conveying device of Raatikainen, since one would have been motivated to make such a modification for analyzing faster (fig. 1, and col. 1, lines 44-47) as implied from Raatikainen.

5. Regarding claim 2, Ohzawa further discloses wherein a second X-ray conductor (fig. 5b, #5) extends from the X-ray source (fig. 1, #3) in the direction of the device (fig. 1, #13).

6. Regarding claim 3, Ohzawa further discloses wherein at least one of the first and the second X-ray conductor comprises one or more hollow tubes (fig. 5b, #5).

7. Regarding claim 6, Ohzawa further discloses wherein at least one of the hollow tubes is provided with a window at an end thereof (fig. 5b, #5) facing the device (fig. 1, #13).

8. Regarding claim 13, Ohzawa further discloses wherein the first and the second X-ray conductors are combined in such a way that a bundle of at least two X-ray conductors is formed at ends of the X-ray conductors (fig. 5b, #5 and 26a) facing the device (fig. 1, #13).

9. Regarding claim 15, Ohzawa as modified above suggests a device as recited above.

However, Ohzawa fails to disclose a distance sensor for measuring a height of a sample surface.

Raatikainen further teaches a distance sensor (fig. 4, #15a) for measuring a height of a sample surface (fig. 4, #1).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further modify the device of Ohzawa with the distance sensor of Raatikainen, since one would have been motivated to make such a modification for standardizing measurements (col. 5, lines 33-54) as implied from Raatikainen to better interpret data.

10. Regarding claim 22, Ohzawa further discloses wherein the first X-ray conductor (fig. 5b, #26) and exciting radiation (fig. 5b, in #5) from the X-ray source are at a substantially equal angle (fig. 5b) relative to a sample surface (fig. 5b, #12).

11. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohzawa and Raatikainen as applied to claim 3 above, and further in view of Kumakhov (US 5192869).

Ohzawa as modified above suggests a device as recited above.

However, Ohzawa fails to disclose wherein a hollow tube is a glass capillary.

Kumakhov teaches wherein a hollow tube is a glass capillary (col. 14, lines 53-64).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further modify the device of Ohzawa as modified above with the glass capillary of Kumakhov, since one would have been motivated to make such a modification for increasing efficiency (col. 14, lines 53-64) as implied from Kumakhov.

12. Claims 7, 9, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohzawa and Raatikainen as applied to claim 3 above, and further in view of Hendee et al. (US 2837656).

13. Regarding claims 7 and 12, Ohzawa as modified above suggests a device as recited above.

However, Ohzawa fails to disclose filling with hydrogen or helium, or connecting to a helium source and flushing with helium.

Hendee et al. teaches filling (fig. 1, at #12) with hydrogen or helium (col. 1, #9 and helium), or connecting to a helium source (fig. 1, #9) and flushing with helium (fig. 1, at #12).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further modify the device of Ohzawa as modified above with the helium

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of Hendee et al., since one would have been motivated to make such a modification for reducing absorption of X-rays (col. 1, line 67, to col. 2, line 5) as shown by Hendee et al., which would reduce the degradation of relevant signals.

14. Regarding claim 9, Ohzawa further discloses wherein at least one second X-ray conductor (fig. 5b, #5) and plural first X-ray conductors (fig. 5b, #26) are provided, said plural first X-ray conductors (fig. 5b, at #26a) arranged around the at least one second X-ray conductor, at least at an end of said at least one second X-ray conductor (fig. 5b, #5) facing the device (fig. 1, #13).

15. Regarding claim 10, Ohzawa further discloses wherein axes of the second X-ray conductor (fig. 5b, #5) and the first X-ray conductor (fig. 5b, #26) jointly enclose an acute angle in the direction of the device (fig. 1, #13).

16. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohzawa, Raatikainen, and Hendee et al. as applied to claim 7 above, and further in view of Kumakhov.

Ohzawa as modified above suggests a device as recited above. Ohzawa further discloses wherein several first and second X-ray conductors exist and are combined so as to create a matrix-type structure (fig. 5b, #5 and 26).

However, Ohzawa fails to disclose several second X-ray conductors, which are several X-ray conductors extending from an X-ray source.

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Kumakhov teaches several X-ray conductors (fig. 1, #1) extending from an X-ray source (abstract).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further modify the device of Ohzawa as modified above with the several X-ray conductors of Kumakhov, since one would have been motivated to make such a modification for increasing efficiency and beam power density (col. 2, lines 27-31) as implied from Kumakhov.

17. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohzawa and Raatikainen as applied to claim 1 above, and further in view of Nakahara et al. (US 5305366).

Ohzawa as modified above suggests a device as recited above.

However, Ohzawa fails to disclose wherein at least one thermal shield is disposed between an X-ray fluorescence detector and a device.

Nakahara et al. teaches wherein at least one thermal shield (fig. 1, #41) is disposed between an X-ray fluorescence detector (fig. 1, #2) and a device (fig. 1, #52).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further modify the device of Ohzawa as modified above with the shield of Nakahara et al., since one would have been motivated to make such a modification for reducing adverse effects on the detector (col. 7, lines 56-65) as shown by Nakahara et al.

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18. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohzawa and Raatikainen as applied to claim 15 above, and further in view of Kojima et al. (US 2001/0021240).

Ohzawa as modified above suggests a device as recited above.

However, Ohzawa fails to disclose wherein a distance sensor is a laser distance sensor.

Kojima et al. teaches wherein a distance sensor (fig. 1, #37) is a laser distance sensor (paragraph 36, last line).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further modify the device Ohzawa as modified above with the laser distance sensor of Kojima et al., since one would have been motivated to make such a modification for higher precision.

19. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohzawa, Raatikainen, and Kojima et al. as applied to claim 16 above, and further in view of Kissinger (US 3327584).

Ohzawa as modified above suggests a device as recited above.

However, Ohzawa fails to disclose wherein a waveguide is connected to a distance sensor to permit remote distance measurement.

Kissinger teaches wherein a waveguide (fig. 5, #1) is connected to a distance sensor (fig. 5, #20) to permit remote distance measurement (col. 1, line 24).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further modify the device of Ohzawa as modified above with the

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waveguide of Kissinger, since one would have been motivated to make such a modification for having a smaller probe with extremely fine measurements (col. 1, lines 17-21) as shown by Kissinger.

20. Claims 1-3, 15, 19-20, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumakhov (US 5497008) in view of Raatikainen (US 5721759).

21. Regarding claim 1, Kumakhov discloses a device comprising a device (fig. 7, #108) for a substance to be measured (fig. 7, #106), and a measuring station, further comprising an X-ray source (fig. 7, #100) and an X-ray fluorescence (col. 6, line 1) detector having a radiation inlet (fig. 7, #112), wherein a first X-ray conductor (fig. 7, #110) extends from the radiation inlet of the X-ray fluorescence detector (fig. 7, #112) in a direction of the device (fig. 7, #108).

However, Kumakhov fails to disclose a conveying device configured to continuously convey a substance to be measured.

Raatikainen teaches a conveying device configured to continuously convey (fig. 1, via #2) a substance to be measured (fig. 1, #1).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to modify the device of Kumakhov with the conveying device of Raatikainen, since one would have been motivated to make such a modification for analyzing faster (fig. 1, and col. 1, lines 44-47) as implied from Raatikainen.

22. Regarding claim 2, Kumakhov further discloses wherein a second X-ray conductor (fig. 7, #104) extends from the X-ray source (fig. 7, #100) in the direction of the device (fig. 7, #108).

23. Regarding claim 3, Kumakhov further discloses wherein at least one of the first (fig. 7, #110) and the second (fig. 7, #104) X-ray conductor comprises one or more hollow tubes (col. 5, lines 20-21).

24. Regarding claim 15, Kumakhov as modified above suggests a device as recited above.

However, Kumakhov fails to disclose a distance sensor for measuring a height of a sample surface.

Raatikainen further teaches a distance sensor (fig. 4, #15a) for measuring a height of a sample surface (fig. 4, #1).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further modify the device of Kumakhov with the distance sensor of Raatikainen, since one would have been motivated to make such a modification for standardizing measurements (col. 5, lines 33-54) as implied from Raatikainen to better interpret data.

25. Regarding claim 19, Kumakhov further discloses wherein an X-ray split lens (fig. 8, #132) for parallel alignment of X-rays is disposed in a beam path from the X-ray source (fig. 8, #130).

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26. Regarding claim 20, Kumakhov further discloses wherein a filter or a monochromatic element (fig. 8, #134) is arranged in a beam path from the X-ray source (fig. 8, #130).

27. Regarding claim 23, Kumakhov further discloses wherein a polarizer (col. 8, lines 24-28) is arranged in a beam path from the X-ray source (fig. 8, #130).

28. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumakhov ('008) and Raatikainen as applied to claim 3 above, and further in view of Kumakhov (US 5192869).

Kumakhov ('008) as modified above suggests a device as recited above. Kumakhov ('008) further discloses wherein at least one hollow tube is a capillary (col. 5, lines 20-21).

However, Kumakhov ('008) fails to disclose wherein a hollow tube is at least partly made of glass.

Kumakhov ('869) teaches wherein a hollow tube is at least partly made of glass (col. 14, lines 53-64).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further modify the device of Kumakhov ('008) as modified above with the glass of Kumakhov ('869), since one would have been motivated to make such a modification for increasing efficiency (col. 14, lines 53-64) as implied from Kumakhov ('869).

29. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kumakhov and Raatikainen as applied to claim 3 above, and further in view of Gorny et al. (DE 4408057).

Kumakhov as modified above suggests a device as recited above. Kumakhov further discloses wherein at least one of the hollow tubes (fig. 7, #104) faces the device (fig. 7, #108).

However, Kumakhov fails to disclose providing a window at an end thereof.

Gorny et al. teaches providing a window at an end (fig. 1, #9) thereof.

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further modify the device of Kumakhov as modified above with the window of Gorny et al., since one would have been motivated to make such a modification for better protection.

30. Claims 7-10, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumakhov and Raatikainen as applied to claim 3 above, and further in view of Hendee et al. (US 2837656).

31. Regarding claims 7 and 12, Kumakhov as modified above suggests a device as recited above.

However, Kumakhov fails to disclose filling with hydrogen or helium, or connecting to a helium source and flushing with helium.

Hendee et al. teaches filling (fig. 1, at #12) with hydrogen or helium (col. 1, #9 and helium), or connecting to a helium source (fig. 1, #9) and flushing (fig. 1, at #12) with helium.

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further modify the device of Kumakhov as modified above with the helium of Hendee et al., since one would have been motivated to make such a modification for

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reducing absorption of X-rays (col. 1, line 67, to col. 2, line 5) as shown by Hendee et al., which would reduce the degradation of relevant signals.

32. Regarding claim 8, Kumakhov further discloses wherein several first and several second X-ray conductors (col. 5, lines 20-21) exist and are combined so as to create a matrix-type structure (fig. 7, #104 and 110).

33. Regarding claim 9, Kumakhov further discloses wherein at least one second X-ray conductor (fig. 7, #104) and plural first (fig. 7, #110) X-ray conductors (col. 5, lines 20-21) are provided, said plural first X-ray conductors (fig. 7, #110) arranged around at least one second X-ray conductor (fig. 7, #104), at least at an end of said at least one second X-ray conductor facing the device (fig. 7, #108).

34. Regarding claim 10, Kumakhov further discloses wherein axes of the second X-ray conductor (fig. 7, #104) and the first X-ray conductor (fig. 7, #110) jointly enclose an acute angle in the direction of the device (fig. 7, #108).

35. Regarding claim 13, Kumakhov further discloses wherein the first and the second X-ray conductors (fig. 7, #104 and 110) are combined in such a way that a bundle of at least two X-ray conductors (col. 5, lines 20-21) is formed at ends of the X-ray conductors facing the device (fig. 7, #108).

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36. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kumakhov and Raatikainen as applied to claim 1 above, and further in view of Nakahara et al. (US 5305366).

Kumakhov as modified above suggests a device as recited above.

However, Kumakhov fails to disclose wherein at least one thermal shield is disposed between an X-ray fluorescence detector and a device.

Nakahara et al. teaches wherein at least one thermal shield (fig. 1, #41) is disposed between an X-ray fluorescence detector (fig. 1, #2) and a device (fig. 1, #52).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further modify the device of Kumakhov as modified above with the shield of Nakahara et al., since one would have been motivated to make such a modification for reducing adverse effects on the detector (col. 7, lines 56-65) as shown by Nakahara et al.

37. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kumakhov and Raatikainen as applied to claim 15 above, and further in view of Kojima et al. (US 2001/0021240).

Kumakhov as modified above suggests a device as recited above.

However, Kumakhov fails to disclose wherein a distance sensor is a laser distance sensor.

Kojima et al. teaches wherein a distance sensor (fig. 1, #37) is a laser distance sensor (paragraph 36, last line).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further modify the device of Kumakhov as modified above with the laser

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distance sensor of Kojima et al., since one would have been motivated to make such a modification for higher precision.

38. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kumakhov, Raatikainen, and Kojima et al. as applied to claim 16 above, and further in view of Kissinger (US 3327584).

Kumakhov as modified above suggests a device as recited above.

However, Kumakhov fails to disclose wherein a waveguide is connected to a distance sensor to permit remote distance measurement.

Kissinger teaches wherein a waveguide (fig. 5, #1) is connected to a distance sensor (fig. 5, #20) to permit remote distance measurement (col. 1, line 24).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further modify the device of Kumakhov as modified above with the waveguide of Kissinger, since one would have been motivated to make such a modification for having a smaller probe with extremely fine measurements (col. 1, lines 17-21) as shown by Kissinger.

39. Claims 11 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumakhov and Raatikainen as applied to claim 1 above, and further in view of Hossain et al. (US 5778039).

Kumakhov as modified above suggests a device as recited above.

However, Kumakhov fails to disclose wherein a first X-ray conductor and exciting radiation from an X-ray source are at a substantially equal flat angle relative to a sample surface.

Hossain et al. teaches wherein a first X-ray conductor (fig. 3, #38) and exciting radiation (fig. 3, #80) from an X-ray source (fig. 3, #30) are at a substantially equal flat angle (figs. 1 and 3) relative to a sample surface (fig. 3, #44).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further modify the device of Kumakhov as modified above with the angle of Hossain et al., since one would have been motivated to make such a modification for providing the space necessary to have a system that reduces time during analysis (col. 1, lines 38-57), while keeping the system compact (fig. 3) as implied from Hossain et al.

40. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kumakhov and Raatikainen as applied to claim 20 above, and further in view of Hossain et al. (US 5754620).

Kumakhov as modified above suggests a device as recited above.

However, Kumakhov fails to disclose a filter functioning as a window.

Hossain et al. teaches a filter functioning as a window (fig. 1a, #84).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further modify the device of Kumakhov as modified above with the filter of Hossain et al., since one would have been motivated to make such a modification for filtering out certain characteristic radiation (col. 7, lines 57-62) as shown by Hossain et al., which would reduce noise.

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41. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kumakhov, Raatikainen, and Hossain et al. as applied to claim 11 above, and further in view of Balu et al. (DD 291420).

Kumakhov as modified above suggests a device as recited above.

However, Kumakhov fails to disclose a flat angle corresponding to a Brewster angle for radiation polarized by a polarizer arranged in a beam path from an X-ray source.

Balu et al. teaches a flat angle corresponding to a Brewster angle for radiation polarized (abstract) by a polarizer (fig. 1, #2) arranged in a beam path from an X-ray source (fig. 1, #1).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further modify the device of Kumakhov as modified above with the angle of Balu et al., since one would have been motivated to make such a modification for obtaining a favorable signal/background ratio and producing high reflection (use/advantage) as shown by Balu et al.

42. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kumakhov and Raatikainen as applied to claim 1 above, and further in view of Webster (US 2763784).

Kumakhov as modified above suggests a device as recited above.

However, Kumakhov fails to disclose wherein a measuring station is arranged on a traversing and/or pivoting carriage.

Webster teaches wherein a measuring station is arranged on a traversing and/or pivoting carriage (col. 3, lines 65-68).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further modify the device of Kumakhov as modified above with the carriage of Webster, since one would have been motivated to make such a modification for having more maneuverability to measure any area of interest at any location.

Allowable Subject Matter

43. Claims 27 and 28 are allowed. The following is a statement of reasons for the indication of allowable subject matter.

44. Regarding claim 27, prior art fails to disclose or fairly suggest a device for realizing an online element analysis, including wherein a first conductor extends from a radiation inlet of an X-ray fluorescence detector in a direction of a conveying device, wherein a second X-ray conductor extends from an X-ray source in the direction of the conveying device, and wherein axes of the X-ray conductors are parallel to each other at ends of said X-ray conductors facing the conveying device, in combination with all the limitations in the claim.

45. Regarding claim 28, prior art fails to disclose or fairly suggest a device for realizing an online element analysis, including a distance sensor for measuring a height of a sample surface, wherein the distance sensor is a laser distance sensor, wherein a waveguide is connected to the laser distance sensor to permit remote distance measurement, and wherein the waveguide forms a bundle together with a first X-ray conductor, in combination with all the limitations in the claim.

Response to Arguments

46. Applicant's arguments with respect to claims 1-17, 19-24, and 26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Cheng Glen Kao whose telephone number is (571) 272-2492. The examiner can normally be reached on M - F (9 am to 5 pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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gk



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